

5 TITLE: CAP FOR SEALING A BATHTUB OVERFLOW PORT
 FOR TESTING PURPOSES

CROSS REFERENCE TO RELATED APPLICATION:

 This application is a continuation of U.S. Patent
10 Application Serial No. 10/247,247 filed September 19,
 2002.

BACKGROUND OF THE INVENTION

 In new building construction, the plumbers prefer
15 not to put the finished closure valves in the bottom of
 tubs, or the finished decorative plate over the overflow
 outlet at the end of the tub until the project is
 finished because these elements will be often damaged as
 the construction project is brought to a close.
20 Further, the piping for both of the outlets need to be
 checked for leaks before the inspection process is
 completed. The test involves running water down the
 vent for the drain until it reaches a level above the
 tub and the tester then determines whether any of the
25 piping leaks. Thus, when the testing operation arrives,
 a plug is put in the bottom drain of the tub and some
 sort of a seal plate is placed at the end of the tub on
 the overflow outlet.

 Existing overflow plates have a center opening
30 therein. There are either two or four small screw holes
 in the plate adjacent the center opening wherein two of
 the holes are used to hold the plate to the plumbing
 fixture. In some cases there is a fitting so that the
 screw hole is located directly in the middle of the
35 access hole. In that case, that hole is in the way when
 the testing procedure is implemented. In any event, the
 testing procedure usually involves stuffing a balloon

5 through the large center opening into the pipe in the
wall and the pipe is sealed when the balloon is
inflated. Further, existing seal plates normally have
to be removed when the decorative plate is put on. The
decorative plate is typically held by two screws which
10 either use the screw openings of the plate or two
additional openings in the case that four holes are
provided.

Some efforts have been made to seal the overflow
ports of bathtubs with a diaphragm, and then cut the
15 diaphragm when the test is completed. (See U.S. Patent
No. 5,890,241). However, the system for including the
diaphragm sometimes involves screws and tools, and is
not always convenient to install or to remove after
testing.

20 It is therefore a principal object of this
invention to provide a seal for a bathtub overflow port
that is very easy to install for testing purposes, and
is easily made operable for overflow purposes when the
testing is finished.

25 A further object of the invention is to provide a
seal for a bathtub overflow port that is very economical
to manufacture.

These and other objects will be apparent to those
skilled in the art.

30

SUMMARY OF THE INVENTION

A temporary closure means for a bathtub overflow
port, comprising placing on the outer end of a drain
pipe extending through the overflow port a cap threaded
35 on the outer end, with a sealing element on its outer
surface.

5 BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a partial perspective view of a conventional bathtub environment utilizing the invention of this application;

Fig. 1A is an enlarged scale sectional view taken
10 on line 1A-1A of Fig. 1;

Fig. 2 is an exploded perspective view of the invention; and

Fig. 3 is a sectional view of the assembled components of Fig. 2.

15

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

With reference to Figs. 1 and 1A, a conventional bathroom structure 10 has a floor 12, and a hollow wall 14 with a wall opening 16 therein. A conventional
20 bathtub ("tub") 18 has a base 20 which rests upon floor 12. Sidewalls 22 extend upwardly from base 20 as does an end wall 24. A bottom 26 dwells in spaced relation to the floor 12.

A conventional drain port 28 is located in bottom
25 26. A conventional overflow port 30 is located in the end wall 24 (Fig. 2). A vertical drain pipe 32 extends downwardly from drain port 28, and overflow drain pipe 34 extends downwardly from overflow port 30. A horizontal pipe 36 connects pipes 32 and 34. A drain
30 pipe 38 extends downwardly from the junction between pipes 34 and 36.

A conventional vertical vent pipe 40 is located within the hollow wall 14. Conventional water pipes 44 extend through hollow wall 40 and are connected to valve
35 46 which is interconnected to conventional control member 48 and faucet 50.

5 With reference to Figs. 2 and 3, a cap 52 has an
outer face 54 which has a cylindrical body 60 which has
interior threads 62 and which are adapted to mate with
the threads 31 of port 30 (Fig. 2). The cap 52 also has
an annular flange 64 that extends radially outwardly
10 from the open end of the cylindrical body 60. A thin
sealing membrane 66 is affixed to the face 54 (Fig. 2)
of cap 52 so as to seal the aperture in the cap when it
is screwed into the threads 31 so that the cap can be
effectively sealed against the port 30.

15 In operation, the cap 52 can either be removed from
the port 30, or the thin sealing membrane 66 can be cut
away so as to permit the attachment of the conventional
overflow mechanisms.

 It is therefore seen that the embodiments of this
20 invention achieve at least all of the stated objectives.